

Mr. David P. Heinrichs is the Nuclear Criticality Safety Division Leader within the Environment, Safety and Health Directorate at the Lawrence Livermore National Laboratory (LLNL). As Division Leader, Mr. Heinrichs' principal responsibility is to provide comprehensive criticality safety support to the LLNL institution, programs, facilities, and all on-site and off-site activities with fissionable materials. Principal customers include the LLNL Nuclear Materials Technology Program (NMTP), Nuclear Counter-terrorism (NCT) Program, Weapons Program, Joint Laboratory Operations – Nevada (JLON) Office, and the US DOE Nuclear Criticality Safety Program (NCSP). As the LLNL Subject Matter Expert (SME) for criticality safety, Mr. Heinrichs is also the technical liaison to the CDNS, DNFSB, DOD, DOE, and NNSA for criticality safety issues.

Mr. Heinrichs received an M.S.E. in nuclear engineering (1982) and B.S. in applied mathematics and physics (1980) from the University of Michigan. Upon graduation, Mr. Heinrichs was selected by the American Nuclear Society (ANS) to participate in an international exchange program in reactor physics at the Commissariat à l'Énergie Atomique Centre d'Études Nucléaires de Cadarache in France. While a graduate student, Mr. Heinrichs was employed by the Theory Group at KMS Fusion, Inc.

Mr. Heinrichs' areas of expertise include nuclear criticality safety, reactor physics, analytical methods, radiation shielding, criticality alarm systems, and nuclear accident dosimetry. Mr. Heinrichs started his professional career as a nuclear engineer at the Yankee Atomic Electric Company from 1983-1986 and Middle South Utilities (now, Entergy) from 1986-1988 where he participated in analytical methods development, fuel design, assembly design, core design, licensing, start-up and fuel management specializing in BWR reactor physics. In 1988, Mr. Heinrichs joined the Rocky Flats Plant as a Senior Principal Criticality Safety Engineer. In 1991, he joined the Lawrence Livermore National Laboratory and provided criticality safety support for LLNL fissile material operations at nine on-site nuclear facilities and two off-site nuclear explosive facilities. In 2006, Mr. Heinrichs accepted his current management position.

Mr. Heinrichs is a Lifetime Member of the American Nuclear Society and served two three-year terms on the ANS Nuclear Criticality Safety Division Executive Committee. In 2006, he received the ANS NCSD Award for Technical Excellence; and in 2022, received the NNSA NA-50 Excellence Award for Excellence in Nuclear Criticality Safety. Mr. Heinrichs is currently active in the following advisory and working groups:

- ANSI/HPS-N13.3 Criticality Accident Dosimetry Working Group
- Consolidated Nuclear Security Nuclear Criticality Safety Committee
- DOE Criticality Safety Support Group (CSSG)
- DOE Cross-Section Evaluation Working Group (CSEWG)
- DOE Nuclear Data Advisory Group (NDAG)
- Integrated Nuclear Criticality Safety Committee of the Nevada National Security Sites
- International Criticality Safety Benchmark Evaluation Project (ICSBEP)
- JOWOG-30-07-04 NNSA Point-of-Contact for Nuclear Criticality Safety